

Operating Instructions for the **kl**angfinder HS8 road case



We are delighted that you have chosen to purchase the Klangfinder HS8 road system.

In doing so, you have acquired a reliable, high-performance product. If you follow the instructions given in this handbook we are sure that you will gain pleasure from your purchase for a long time to come.

System description

The patented Klangfinder HS8pro Klangfinder HS8pro makes it possible for your customers to experience the benefits of various hearing aids at their own selection. A press of a button is enough!

The Klangfinder HS8pro allows actual comparison of different hearing aids in real-time. The hearing aids are compared with one another at short intervals in a natural soundscape.

The trust gained by your customers through personal experience becomes a sales argument.

The new Klangfinder HS8pro uses completely newly developed electronics which greatly simplifies the use of its main functions.

The housing consists of a combination of white, transparent Plexiglas and solid aluminium. The couplers are manufactured from stainless steel.

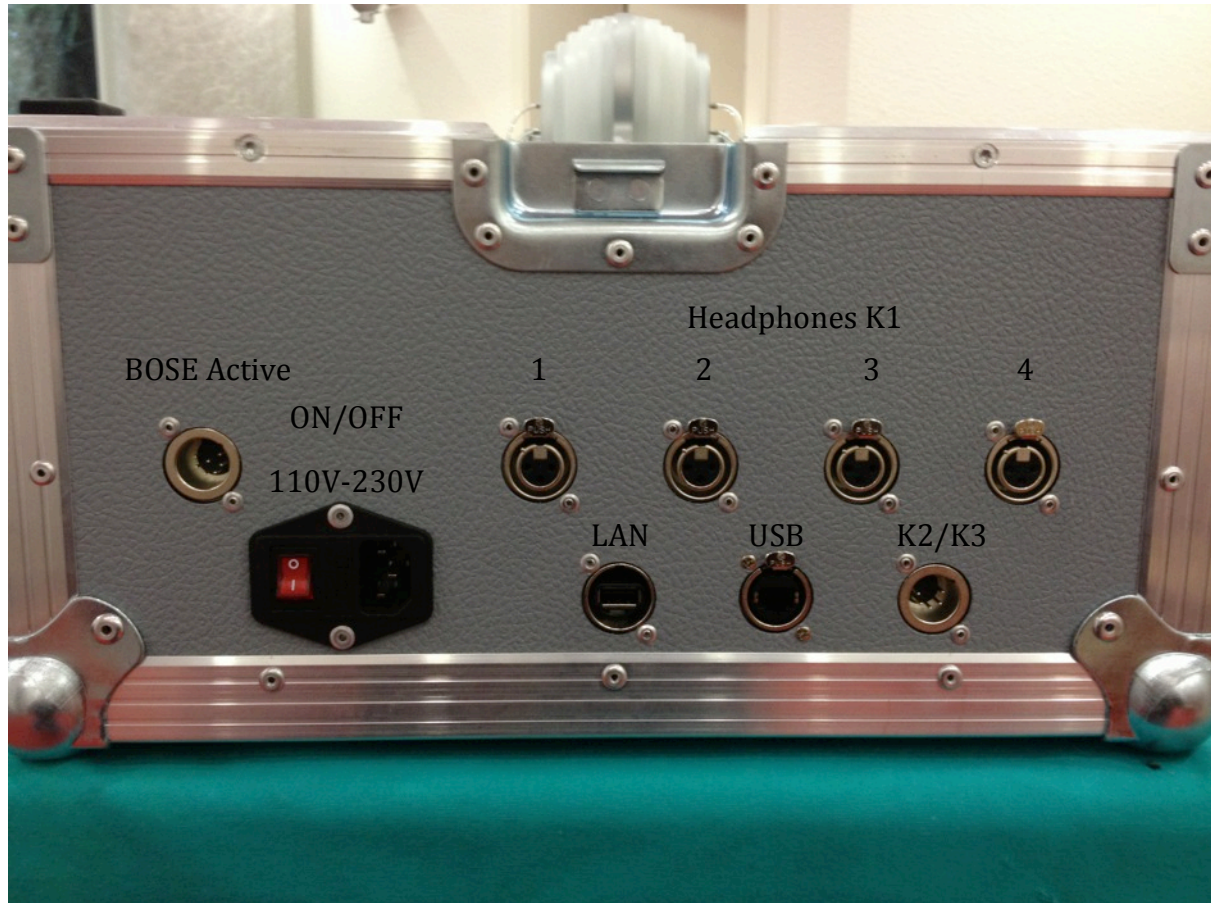
With the illumination of the transparent layers the Klangfinder aids in the visualisation of the active hearing aid at any given time. The configuration of colours is carried out via the integrated web interface.

A total of 8 couplers are able to be used on the head.

A highlight is the 8 large Ear channels. Artificial auditory canals can be positioned in the deep ear canals. This allows optimal demonstration of ITC, CIC and hearing aids with in-ear receivers (RITE).

The Pro version includes extra powerful headphone amps, to connect up to 12 headphones in conjunction with the Road System MKII for presentations, seminars and lectures. The coupler microphones and preamps of the Klangfinder HS8pro are designed for speech from the distance so that you, in conjunction with the ear canals can demonstrate hearing aids, in-ear monitoring and passive systems such as ear protection.

Connections



- 1. BOSE Active** Please use the multi-patch cable to connect the active BOSE speaker.
- 2. Headphones K1** There are 4 headphone jacks for headphone amplifier K1 of Klangfinder available. Please use the volume control K1 of the Klangfinder.
- 3. ON/OFF 110V-230V** Please use the compliant power cord for your country. The integrated power supplies are suitable for AC 110V-230V range.
- 4. LAN** LAN port for the Klangfinder. For the use take the instruction manual of the Klangfinder. **WARNING!!: The Cases delivered in Germany include as standard a small WIFI router with DHCP server. SSID: Klangwelt Password: klangwelt**

In this case, the LAN port is not suitable to integrate into your own network! For questions please do not hesitate to contact us.

5. USB

The USB port is for future options prepared and currently unassigned.

6. K2/K3

Connection for a multicore for headphone amplifier K2 and K3. Please use the volume control K2/K3 of the Klangfinder.

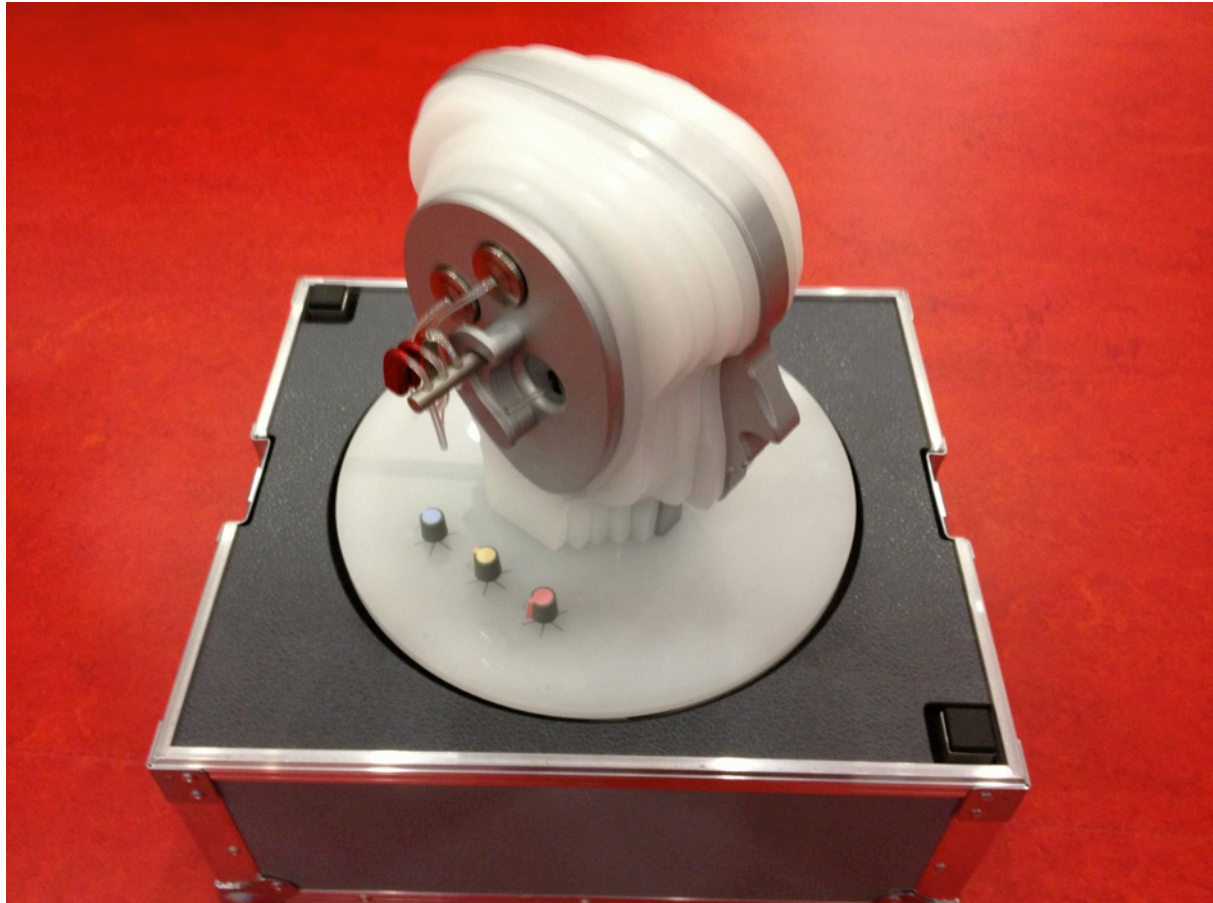


5. BOSE Passive

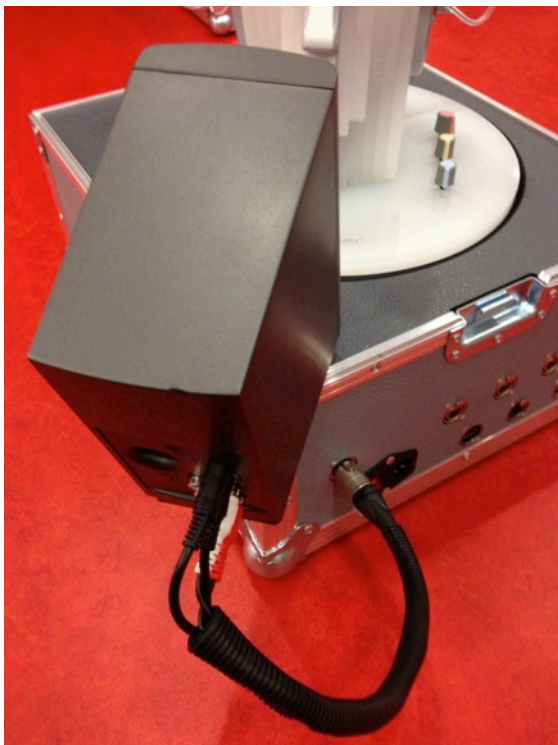
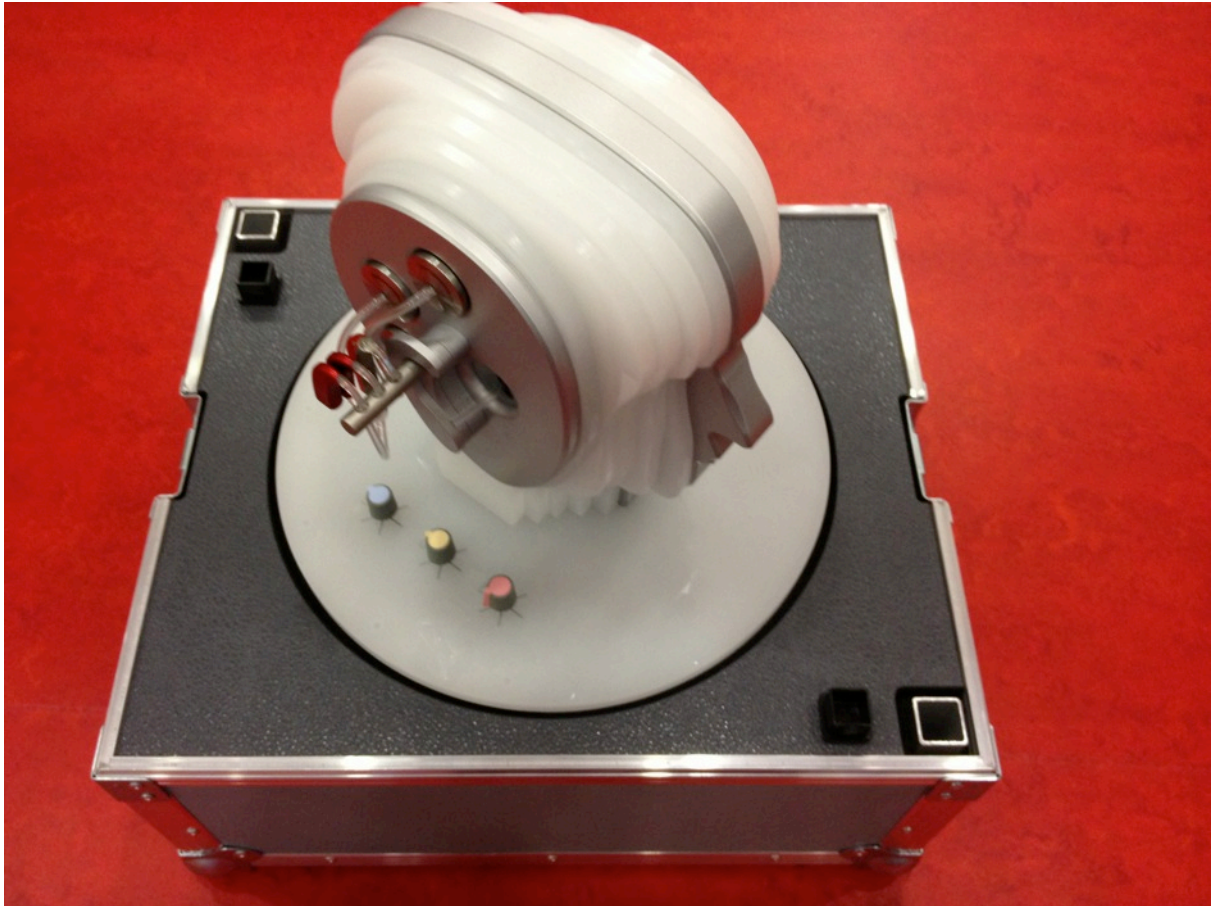
Connection socket for the passive Bose speaker.

Build up

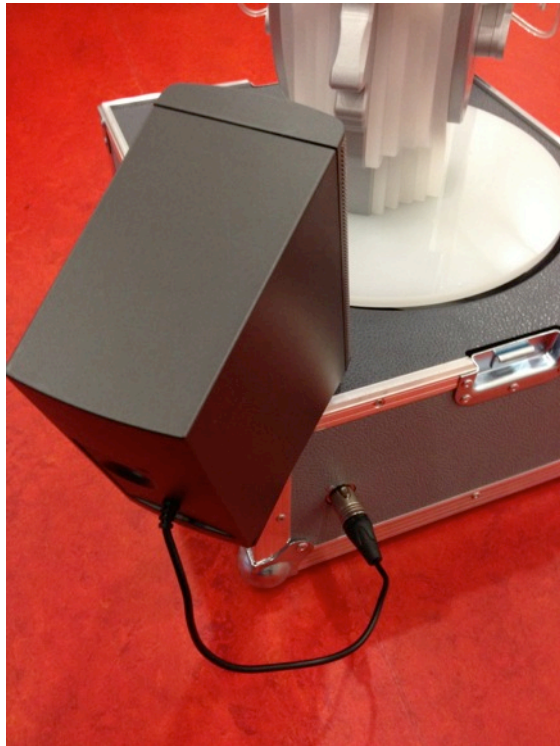
Please remove the cover of the head cases.



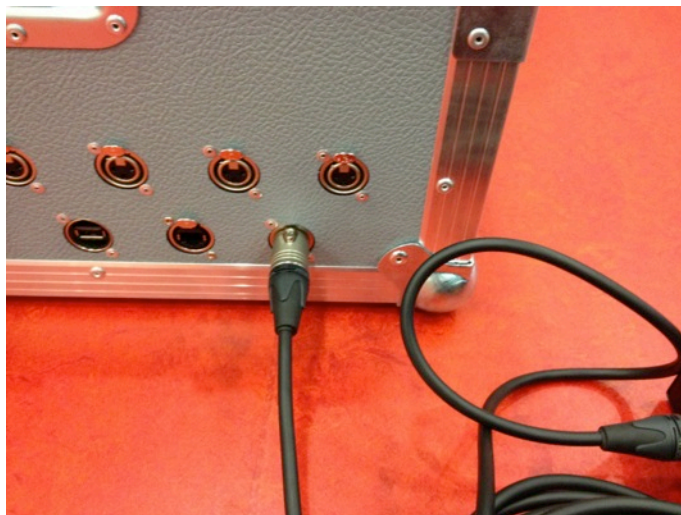
Please remove the cap of the speaker bracket.



Please set up the active speaker and connect it with the multi-patch cable.



Following please set up the passive speaker to the opposite side and connect the cable to the corresponding connector.



Please link the optional multicore for K2/K3 to the corresponding connector.



Connect the other end of the multicore cable to the optional stage box. The volume for the ports 1-4 you control at the Klangfinder with the volume control K2, the volume of the ports 5-8 with the volume control of the K3 Klangfinder.

After connecting the system to the local power grid and switching on, the system is operational.

**Further documents and downloads are available at our website:
<http://www.klangspektrum.de/> in the support area.**

Please observe the following safety instructions before using!

Safety instructions

For your own safety read this instruction booklet carefully and thoroughly before first operation!

All individuals who are involved in the installation, commissioning, operation, servicing and maintenance of the Klangfinder HS8 +/-pro road must:

- be appropriately qualified
- observe this handbook and instructions within exactly
- view this handbook as part of the product
- retain this handbook throughout the life of the product
- pass this handbook on to all and any subsequent owners or users of this device

This device left our factory in a technological condition in which it is completely safe to operate. In order to maintain this condition and to ensure operation free of danger, the user must observe the safety instructions and the warnings contained within these safety instructions.

The following must be read:

In case of damages resulting from non-adherence to information within this handbook, all guarantee claims are voided. The manufacturer accepts no responsibility for consequential damages that may result.

Please check that there is no obvious transport damage prior to commissioning the product.

If you should discover damage to the cable for the external power supply or the housing, do not put the device into operation and please contact Klangspektrum.

The construction of the device corresponds with that required for class I electrical equipment. The power supply plug may only be connected to an earth-isolated socket with voltage and current corresponding exactly to the device type label. Unsuitable voltages can destroy the device and can lead to potentially fatal electrical shock.

Always insert the power supply plug last. The power supply must be inserted without force. Ensure the power supply plug is sitting firmly in place. Do not allow the power supply cable to come into contact with other cables! Take care when handling power cables and connections. Do not handle the components with damp or wet hands! Damp or wet hands can result in potentially fatal electrical shock.

Do not alter power cables, do not crimp, mechanically stress, place heavy weights on, pull or heat power cables and do not place them near sources of heat or cold. Failure to observe these instructions can lead to damage to the power supply cable, to fire or to fatal electrical shock.

The cable insert or coupling on the device must not be placed under physical tension. An appropriate length of cable must be provided to reach the device in all cases. If not cables may be damaged, which can lead to fatal electrical shock.

Ensure that the power supply cable is not at risk of being crushed or damaged by sharp edges. Check the device and the power supply cable for damage at regular intervals. If extension cables are used it is imperative to ensure that the lead diameter is of the correct specification to carry the amount of current required by the device. All warnings provided for the power supply cable apply also to any extension cables which may be used.

Remove the device from the power supply when not in use and for cleaning! To do so, hold the power supply plug by the grip, never pull the cable! Otherwise the cable and the plug may be damaged which can lead to fatal electrical shock. If the plug or device switches are not accessible, for example as a result of mounted installation, then the device must be disconnected fully from the power supply network (wall socket).

Under no circumstances may fluids of any type be allowed to enter the sockets, plug connectors or any openings in the device. If it is suspected that even the slightest amount of fluid may have entered the device, the device must be immediately and completely disconnected from the power supply network. This applies also if the device has been exposed to high humidity conditions. Even if the device still appears to function, it must be fully checked by a qualified technician to determine whether any electrical insulation has been affected. Reduced electrical insulation can lead to fatal electrical shock.

No foreign objects may enter the device. This is particularly valid for metal objects. Even if the smallest of metal items such as paperclips or staples or large metal shavings enter the device, the device must be put out of operation immediately and must be disconnected fully from the power supply network. Incorrect function and short circuiting caused by metal objects can lead to fatal injuries. **Before the device is turned on, all volume controls must be set to "0" or the minimum setting.**

HEALTH RISK!

Operation of the Klangfinder entails the potential to produce sounds which are capable of causing irreparable hearing damage.

There are no serviceable parts within the device. Any servicing is to be carried out solely by authorised specialised traders!

CORRECT OPERATION

Stand 27.12.2012

This product is solely designed for use in interior rooms.

Avoid shaking the device and any use of force when installing or commissioning the device.

When selecting the location to install the device, take care that the device is not exposed to excessive heat, damp/humidity and dust. Ensure that no cables are lying about exposed. These otherwise endanger the safety of you and others!

The ambient temperature must be between -5° C and +45° C. Keep the device out of direct sunlight (also during transport in enclosed vehicles) and away from radiators and heaters.

The relative humidity may not exceed 50% at an ambient temperature of 45° C. This device may only be operated at altitudes between -20 and 2000 m above sea level. Only put the device into operation once you have become familiar with its functionality.

Do not allow the device to be used by people who are not familiar with it. If devices no longer function correctly, this is usually due to incorrect operation!

Never clean the device with solvents or harsh cleaning products, use a soft damp cloth to clean it instead.

If the device is to be transported, please only use the original packaging in order to avoid damage during transport. If the original packaging is no longer available, we will be happy to send you new packaging. All guarantee claims are voided for devices that are not transported in the original packaging.

If the device is used or operated in a manner which differs from that described in this handbook, it can lead to damage to the product and all guarantee claims will be voided. Furthermore, any non-intended use is also associated with dangers such as short-circuiting, fire risk, electrical shock etc.

Basic Hearing Information

Overview of different noise levels

20 dB	rustling leaves
40 dB	in living room with windows closed
60 dB	conversation
70 dB	open plan office
85 dB	medium traffic noise
95 dB	heavy-vehicle traffic
100 dB	jack-hammer
110 dB	rock or pop concert (at some distance from the stage)
125 dB	starting jet plane at a distance of 100 m
130 dB	pain threshold
140 dB	jet plane at a distance of 25 m

Stand 27.12.2012

It should be taken into consideration that a doubling of the power supplied (to an amplifier) corresponds to an increase in noise level of 3 dB. However, the human ear only registers a doubling in volume at an increase in the noise level of 10 dB. Damage to hearing is dependent on the noise level and damage commences long before the pain threshold is reached!

Many people make the mistake of imagining that noise is something that you „get used to“. There is no point arguing against the assertion that a positive attitude towards a particular sound can lessen physiological reactions. However the lingering effect on the inner ear is an entirely different matter: the overstimulation and gradual disintegration of the hair cells in the organ of corti.

Subjectively the degradation in hearing is perceived as if the ears were “packed in cotton wool”. Often there is a quick recovery of the hairs, however, some loss in sensitivity of hearing generally remains.

In order to ensure appropriate recovery of hearing, the noise level should not exceed 70 db(A) for a period of at least 10 hours. Significantly higher sound pressure levels during this rest period can make recovery more difficult and can make it more likely that permanent reduction or damage to hearing occurs.

Therefore, on the basis of this information: protect your hearing and that of your customers!

Please note and observe:

- **Never switch the Klangfinder HS8 pro on or off while wearing the headphones!**
- **When adjusting sound level always move towards the target sound from the minimum setting!**
- **Please do not place headphones close to the artificial head when using higher levels of amplification (risk of feedback!).**
- **Please switch the hearing aids to mute with the remote control before removing the headphones.**
- **Reduce the volume of the removed headphones on the headphones amplifier, so that feedback can be safely avoided.**

Should you have any queries we are at your disposal at any time.

Warm regards

Your Klangfinder Team

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